



Two U.S. Soldiers Exposed to Sarin Nerve Agent in Iraq

On May 15, a 155-millimeter artillery round containing sarin was found along the highway near Baghdad. The shell, which had been rigged as an explosive device, exploded before it could be disarmed, producing a small dispersal of sarin. Two soldiers who removed the bomb experienced symptoms consistent with low-level sarin gas exposure, which can include localized sweating, muscular twitching, running nose, tightness of the chest, shortness of breath and dimness of vision.

Sarin, accidentally discovered by Nazis in 1938, can be inhaled, ingested, or absorbed through the skin and eyes. It resurfaced in 1995 as a chemical threat when the Japanese cult group Aum Shinrikyo released homemade sarin nerve gas in the Tokyo subway system, killing 12 people and injuring nearly 6,000. Sarin inhibits the action of acetylcholine esterase, which results in a build up of acetylcholine within the nervous system. Continuous nervous impulses cause muscles and body organs to

be overstimulated. In large enough doses, sarin causes convulsions, paralysis, coma and respiratory failure. However, small exposures can be treated with antidotes such as atropine or pralidoxime chloride.

Earlier this month, U.S. troops also detected trace elements of mustard agent in an artillery shell found in a Baghdad street. This, along with the round containing sarin, is believed to be leftover from Saddam Hussein's old arsenal stockpile, and may have been scavenged from a dump by insurgents. It is likely that the insurgents who planted the explosive did not know it contained the nerve agent. The

shell did not have any markings to indicate it contained a chemical agent, which brings up concerns that a release of sarin in a densely populated area, either deliberately or unwittingly, could kill large numbers of military personnel and civilians. It is unclear whether more such weapons are in the hands of insurgents.

Destruction of 122mm sarin-filled rockets in the 1990's



USDA Begins Testing for Mad Cow Disease in Cattle Nationwide

The Department of Agriculture began testing thousands of Washington state cattle for mad cow disease to determine the presence of infection, if any, in the United States. Also known as bovine spongiform encephalopathy (BSE), this disease is a transmissible, slowly progressive, and fatal disease affecting the central nervous system of cattle.

Consumption of BSE-contaminated beef products has been linked to the new Variant Creutzfeldt-Jacob

Disease (vCJD) in humans, an invariably fatal and degenerative brain disorder similar to BSE in which there is no known treatment.

Over the next year and a half, at least 220,000 cattle nationwide will be tested with a rapid 24-hour test. Although this screening process will test less than 1 percent of the 35 million cattle slaughtered each year, officials say they expect to find a small number of cattle to be infected with the disease.